

CLEAR OR TRANSLUCENT AQUEOUS FABRIC SOFTENER COMPOSITIONS CONTAINING HIGH ELECTROLYTE
CONTENT AND OPTIONAL PHASE STABILIZERTECHNICAL FIELD

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The present invention relates to specific clear or translucent fabric softener compositions. Specifically, clear, or translucent liquid compositions are prepared with high electrolyte levels to provide a dilution viscosity benefit and/or to allow the use of less and/or additional principal solvents as described hereinafter. Optionally, but preferably, the compositions can also contain an optional phase stabilizer, e.g., nonionic, ethoxylated cationic, etc. surfactant to improve properties.

BACKGROUND OF THE INVENTION

Concentrated clear compositions containing ester and/or amide linked fabric softening actives and specific principal solvents are disclosed in U. S. Pat. No. 5,759,990, issued Jun. 2, 1998 in the names of E. H. Wahl, H. B. Tordil, T. Trinh, E. R. Carr, R. O. Keys, and L. M. Meyer, for Concentrated Fabric Softening Composition With Good Freeze/Thaw Recovery and Highly Unsaturated Fabric Softener Compound Therefor, and in U. S. Pat. No. 5,747,443, issued May 5, 1998 in the names of Wahl, Trinh, Gosselink, Letton, and Sivik for Fabric Softening Compound/Composition, said patents being incorporated herein by reference. The fabric softener actives in said patents are preferably biodegradable ester-linked materials, containing, long hydrophobic groups with unsaturated chains. Similar clear liquid fabric softening compositions are described in WO 97/03169, incorporated herein by reference, which describes the formulation of liquid fabric softening compositions using said specific principal solvents.

Lowering the principal solvent/softener ratio below a critical point can result in an increase in viscosity and/or gelling of the fabric softener composition on dilution into water which adversely affects performance through an increase in fabric staining incidents, more residue left in machine-attached and machine-independent dispensers, less deposition of fabric softener active, and less uniform deposition of fabric softener active. This critical ratio differs for the different solvents, but in general it is believed that the solvent/softener ratio at which gelling occurs is higher for relatively water immiscible solvents vs. water miscible solvents. The gelling and/or increased viscosity upon dilution is particularly unacceptable when it occurs between the dilution ratios of from about 1:1 to about 1:5 (fabric softener composition to water) since many consumers practice the habit of pre-diluting fabric softener compositions to these ratios. This habit is typical and is recommended by many washing machine manufacturers for consumers

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This application is a 371 of PCT/US98/25079 filed 11/24/98, which claims benefit of provisional application 60/066424 filed 11/24/97 which claims benefit to provisional application 60/098450 filed 8/31/98 which claims benefit to provisional application 60/098455 filed 8/31/98 which claims benefit to provisional application 60/098514 filed 8/31/98 which claims benefit to provisional application 60/098545 filed 8/31/98.